ABSTRACT OF THE DISCLOSURE

OPTIMIZATION OF NUMBER OF TRANSCEIVERS USED IN A SWITCH

A switch. The switch includes a port card. The switch includes a network connected to the port cards. The network having transmitters and receivers that communicate with each other and have assignments between each other. The switch includes a fabric connected to the port card through the network to send and receive fragments of packets to or from the port card. The port card, fabric and network have a plurality of modes of operation. switch includes a control mechanism connected to the transmitters and receivers which changes the assignments according to the mode. The control mechanism changes the mode and reuses the transmitters and receivers where they can be reused. A method for switching fragments of packets. The method includes the steps of assigning assignments between transmitters and receivers of a network. Then there is the step of transferring the fragments of packets between fabrics and port cards with the transmitters and receivers of the network. Next there is the step of changing a mode of the fabrics, port cards and networks. Then there is the step of changing the assignments of the transmitters and receivers according to the mode and reusing the transmitters and receivers where they can be reused.